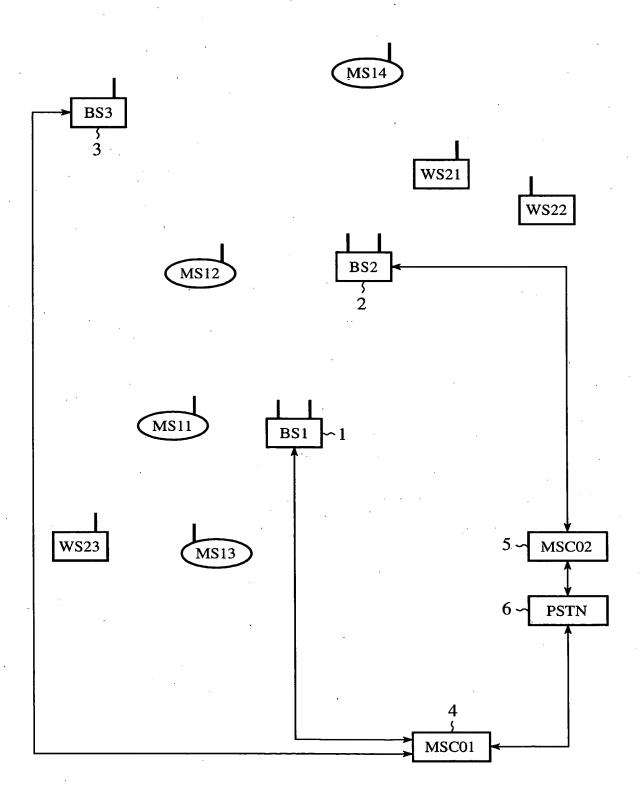
FIG.1



for a first state of the state

TIME t				FIG.2
T2 <sub>3A</sub>	HIGH-SPEED TD-CDMA for PCS #31-3A	#32 -3A	MEDIUM-SPEED- TDMA DATA COMMUNICA- TION #34-3A #35	MEDIUM-SPEED TD-CDMA for Cellular #37-3A
T2 <sub>2A</sub>	HIGH-SPEED TD-CDMA for PCS #31-2A	#32 -2A	*#33   #35   TDM	H-SPEED IA DATA IMUNICATION 2A
T2 <sub>1A</sub>	HIGH-SPEED TD-CDMA for PCS #31-1A	#32 -1A	*#33   #35   TDM	H-SPEED IA DATA IMUNICATION IA
T2 <sub>0A</sub>	HIGH-SPEED TD-CDMA for PCS #31-0A	#32 -0A	MEDIUM-SPEED TDMA DATA COMMUNICA- TION #34-0A #35	MEDIUM-SPEED TD-CDMA for Cellular #37-0A
R1 <sub>3B</sub>	HIGH-SPEED TD-CDMA for PCS #31-3B	#32 -3B	MEDIUM-SPEED TDMA DATA COMMUNICA- TION #34-3B #35	MEDIUM-SPEED TD-CDMA for Cellular #37-3B
R1 <sub>2B</sub>	HIGH-SPEED TD-CDMA for PCS #31-2B	#32 -2B	*#33   #35   TDM	H-SPEED IA DATA IMUNICATION 2B
Rl <sub>IB</sub>	HIGH-SPEED TD-CDMA for PCS #31-1B	#32 -1B	*#33   #35   TDM	H-SPEED IA DATA IMUNICATION IB
R1 <sub>0B</sub>	HIGH-SPEED TD-CDMA for PCS #31-0B	#32 -0B	MEDIUM-SPEED TDMA DATA COMMUNICA- TION #34-0B #35	MEDIUM-SPEED TD-CDMA for Cellular #37-0B
T1 <sub>3A</sub>	HIGH-SPEED TD-CDMA for PCS #31-3A	#32 -3A	MEDIUM-SPEED TDMA DATA COMMUNICA- TION #34-3A #35	MEDIUM-SPEED TD-CDMA for Cellular #37-3A
Tl <sub>2A</sub>	HIGH-SPEED TD-CDMA for PCS #31-2A	#32 -2A	*#33 #35 TDM	H-SPEED IA DATA IMUNICATION 2A
T1 <sub>1A</sub>	HIGH-SPEED TD-CDMA for PCS #31-1A	#32 -1A	*#33   #35   TDN	H-SPEED IA DATA IMUNICATION IA
T1 <sub>0A</sub>	HIGH-SPEED TD-CDMA for PCS #31-0A	#32 -0A	MEDIUM-SPEED TDMA DATA COMMUNICA- TION #34-0A -0A	MEDIUM-SPEED TD-CDMA for Cellular #37-0A
SLOT	E DIVISION CDMA TIME FOR HIGH-SPEED A TRANSMISSION		OW-SPEED TD-C	SLOT FOR FREQUENCY F DMA LULAR SYSTEM

MOBILE COMMUNICATION SYSTEM SHARING TIME DIVISION CDMA SIGNAL AND TDMA SIGNAL (SHOWING TDD UP/DOWN-LINK NOTE: \*#33 INDICATES TDMA)

TIN	ME t			_	$\mathbf{F}$	[G.3	3
T2 <sub>3A</sub>	HIGH-SPEED TD-CDMA for PCS #31-3A	#32 -3A.	MEDIUM- SPEED TDMA DATA #34-3A				
T2 <sub>2A</sub>	HIGH-SPEED TD-CDMA for PCS #31-2A	#32 -2A	*#33 -2A #35 -2A	HIGH-SPEED TDMA DATA COMMUNICATION #36-2A		Down	÷.
T2 <sub>1A</sub>	HIGH-SPEED TD-CDMA for PCS #31-1A	#32 -1A	*#33 -1A #35 -1A	HIGH-SPEED TDMA DATA COMMUNICATION #36-1A		-Link	
T2 <sub>0A</sub>	HIGH-SPEED TD-CDMA for PCS #31-0A	#32 -0A	MEDIUM- SPEED TDMA DATA #34-0A				
R1 <sub>1B</sub>	HIGH-SPEED TD-CDMA for PCS #31-1B	#32 -1B	MEDIUM- SPEED TDMA DATA #34-1B	#35 -1B MEDIUM-SPEED TD-CDMA for Cellular #37-1B		Up-	•
R1 <sub>0B</sub>	HIGH-SPEED TD-CDMA for PCS #31-0B	#32 -0B	*#33 -0B #35 -0B	HIGH-SPEED TDMA DATA COMMUNICATION #36-0B	,	Link	
T1 <sub>5A</sub>	HIGH-SPEED TD-CDMA for PCS #31-5A	#32 -5A	*#33 -5A #35 -5A	HIGH-SPEED TDMA DATA COMMUNICATION #36-5A			ЭТН
T1 <sub>4A</sub>	HIGH-SPEED TD-CDMA for PCS #31-4A	#32 -4A	MEDIUM- SPEED TDMA DATA #34-4A		· 		ONE FRAME LENGTH
T1 <sub>3A</sub>	HIGH-SPEED TD-CDMA for PCS #31-3A	#32 -3A	MEDIUM- SPEED TDMA DATA #34-3A	II - IIII-CIJIVIA IOF I		Down	ONE
Tl <sub>2A</sub>	HIGH-SPEED TD-CDMA for PCS#31-2A	#32 -2A	*#33 -2A #35 -2A	HIGH-SPEED TDMA DATA COMMUNICATION #36-2A		-Link	
Tl <sub>IA</sub>	HIGH-SPEED TD-CDMA for PCS #31-1A	#32 -1A	*#33 -1A #35 -1A	HIGH-SPEED TDMA DATA COMMUNICATION #36-1A			
Tl <sub>OA</sub>	HIGH-SPEED TD-CDMA for PCS #31-0A	#32 -0A	MEDIUM- SPEED TDMA DATA #34-0A				
SLO	T FOR HIGH-SPEED	FOR LO	OMA TIME SLOT OW-SPEED VOICE	TIME SLOT FOR TD-CDMA CELLULAR SYSTEM	FRE	QUENC	Υf

MOBILE COMMUNICATION SYSTEM SHARING TIME DIVISION CDMA SIGNAL AND TDMA SIGNAL (SHOWING ASYMMETRICAL TDD UP/DOWN-LINK NOTE: \*#33 INDICATES TDMA)

# EXAMPLES OF MOBILE STATION SWITCHING TIME USABLE TRANSMISSION RATES

NO.	MOBILE STATION NO.	SWITCHING TIME (ms)	USABLE DATA TRANSMISSION RATE (kbps)
MS11	19980428	0.1	UP: INTERMITTENT 1,2,4,8,32,1024 DOWN: INTERMITTENT 1,2,4,8,32,1024,2048
MS12	19980429	0.2	UP: INTERMITTENT 1,2,32,1024 DOWN: INTERMITTENT 1,2,32,1024,4096
MA13	19980501	0.1	UP: INTERMITTENT 1,2,4,8,32 DOWN: INTERMITTENT 1,2,4,8,32,1024
MA14	19980503	10.0	UP: INTERMITTENT 1,2,8 DOWN: INTERMITTENT 1,2,4,8,32,1024,4096
WS21	19980601	0.2	UP: INTERMITTENT 1,2,32,1024 DOWN: INTERMITTENT 1,2,32,1024,4096
WS22	19980605	5.0	UP: INTERMITTENT 1,2,4,8,32,4096 DOWN: INTERMITTENT 1,2,4,8,32,1024
WS23	19980614	0.1	UP: INTERMITTENT 1,2,4,8,32,1024 DOWN: INTERMITTENT 1,2,4,8,32,1024,2048

(EXAMPLE OF MOBILE STATION INFORMATION MEMORY IN MSC)

# ASSIGNMENT OF PLURAL CHANNELS AND STATE-OF-USE DISPLAY MEMORY

MOBILE STATION NO.	SWITCHING TIME (ms)	Up-Link/ Down-Link	1ST CHANNEL USE/NONUSE	2ND CHANNEL USE/NONUSE	3RD CHANNEL USE/NONUSE	4TH CHANNEL USE/NONUSE
19980428	0.1	Up	INTERMITTENT #35-0B	1kbps #32-0B	8kbps #32-3B	1024kbps #31-0B
(MS11)	0.1	Down	INTERMITTENT #35-0A	2kbps #32-1A	32kbps #37-0A	<u>2048kbps</u> #31-1A
19980429	0.2	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	1024kbps #31-0B
(MS12)		Down	INTERMITTENT #35-0A	4kbps #32-2A	32kbps #37-0A	4096kbps #31-2A
19980501	0.1	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	
(MS13)	0.1	Down	INTERMITTENT #35-0A	1kbps #32-0A	32kbps #37-0A	1024kbps #31-0A
19980503	10.0	Up	INTERMITTENT #35-0B	1kbps #32-0B	8kbps #32-3B	
(MS14)	10.0	Down	INTERMITTENT #35-0A	1kbps #32-0A	8kbps #32-3A	1024kbps #31-0A
19980601	0.2	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	<u>1024kbps</u> #31-0B
(WS21)	0.2	Down	INTERMITTENT #35-0A	4kbps #32-2A	32kbps #37-0A	4096kbps #31-2A
19980605	5.0	· Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	4096kbps #31-2B
(WS22)	5.0	Down	INTERMITTENT #35-0A	1kbps - #32-0A	32kbps #37-0A	1024kbps #31-0A
19980614	0.1	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	1024kbps #31-0B
(WS23)	0.1	Down	INTERMITTENT. #35-0A	<u>2kbps</u> #32-1A	32kbps #37-0A	2048kbps #31-1A

NOTE: UNDERLINED CHANNELS ARE CURRENTLY IN USE.

FIG.6

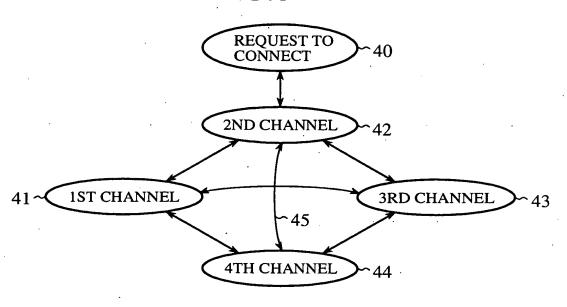
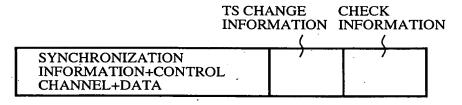
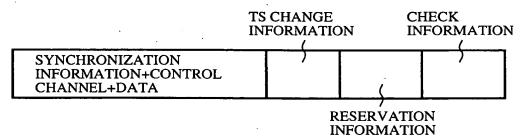
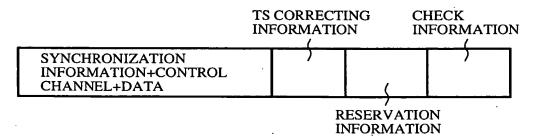


FIG.8

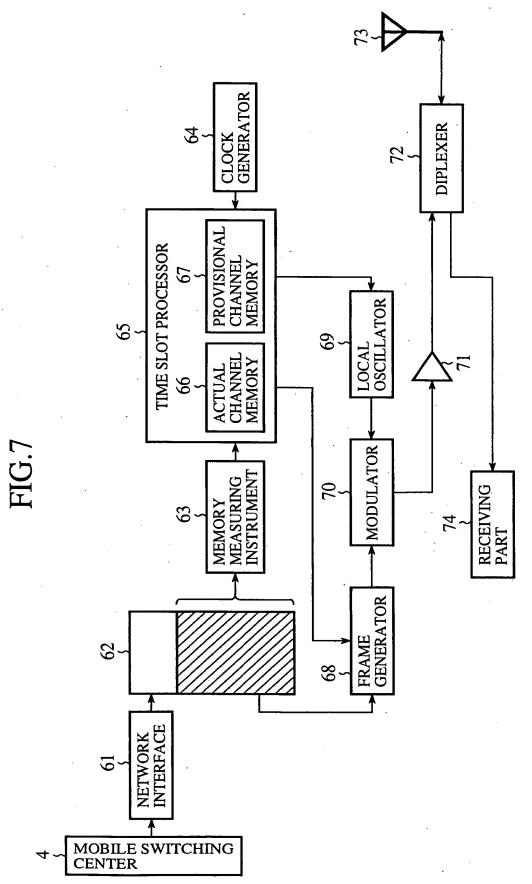




### **FIG.12**







# CHANNEL ASSIGNMENT BEFORE ACTUAL USE

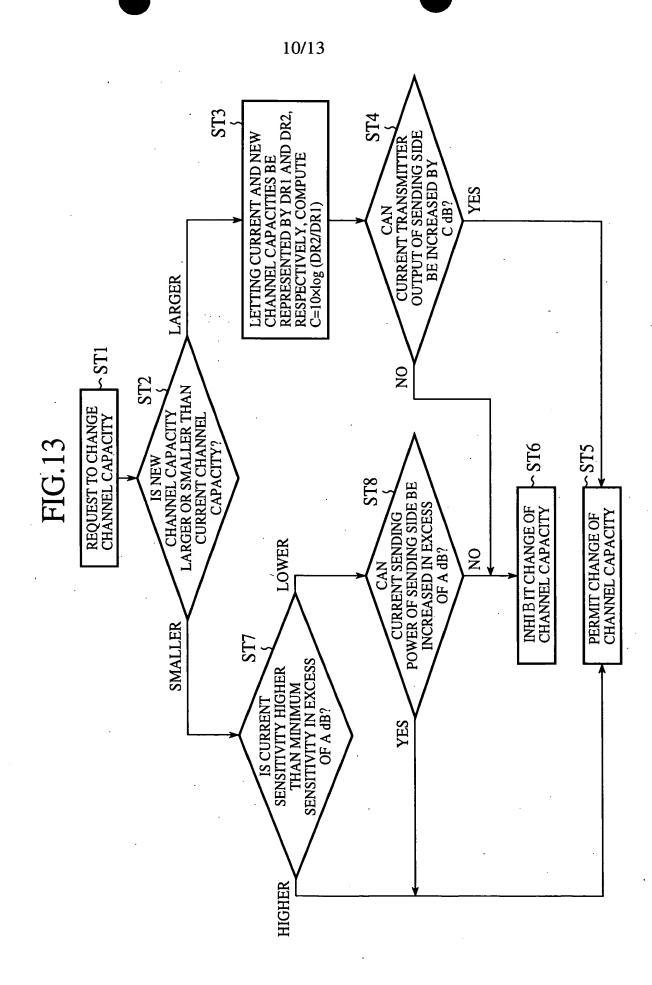
MOBILE STATION NO.	MOBILE SWITCHING Up-Link/ STATION TIME (ms) Down-Link NO.	Up-Link/ Down-Link	1ST CHANNEL USE/NONUSE	2ND CHANNEL CI USE/NONUSE	ND HANNEL SE/NONUSE	4TH CHANNEL USE/NONUSE
19980428	0.1	dN	INTERMITTENT #35-0B	<u>1kbps</u> #32-0B	8kbps #32-3B	1024kbps #31-0B
(MS11)	1.0	Down	INTERMITTENT #35-0A	2kbps #32-1A	32kbps #37-0A	2048kbps #31-1A
19980429	60	dN	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	1024kbps #31-0B
(MS12)	7:0	Down	INTERMITTENT #35-0A	4kbps #32-2A	32kbps #37-0A	4096kbps #31-2A

NOTE 1: UNDERLINED CHANNELS ARE CURRENTLY IN USE.
NOTE 2: BOLDFACED CHANNEL (#37-0A OF MS12) CANNOT BE USED
BECAUSE MS11 HAS ACTUALLY ASSIGNED THE SAME SLOT.

# CHANNEL ASSIGNMENT BEFORE ACTUAL USE

MOBILE STATION NO.	SWITCHING Up-Link/ TIME (ms) Down-Link	Up-Link/ Down-Link	IST CHANNEL USE/NONUSE	2ND CHANNEL USE/NONUSE	3RD CHANNEL USE/NONUSE	4TH CHANNEL USE/NONUSE
19980428	0.1	dn	INTERMITTENT #35-0B	1kbps #32-0B	8kbps #32-3B	1024kbps #31-0B
(MS11)	1.0	Down	INTERMITTENT #35-0A	2kbps #32-1A	32kbps #37-0A	2048kbps #31-1A
19980429	60	ďΩ	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	1024kbps #31-0B
(MS12)	7:0	Down	INTERMITTENT #35-0A	4kbps #32-2A	32kbps #37-3A	4096kbps #31-2A

NOTE 1: UNDERLINED CHANNELS ARE CURRENTLY IN USE.
NOTE 2: SINCE MS11 HAS ACTUALLY ASSIGNED #37-0A,
MS12 IS ASSIGNED ANOTHER SLOT (#37-3A).



CLOCK GENERATOR DIPLEXER PROVISIONAL CHANNEL MEMORY TIME SLOT PROCESSOR 87 LOCAL OSCILLATOR 85 ACTUAL CHANNEL MEMORY **►** MODULATOR MEMORY MEASURING INSTRUMENT 96 83 46^ FRAME GENERATOR 82 88 MAN-MACHINE INTERFACE 81

RECEIVING PART

FIG.15

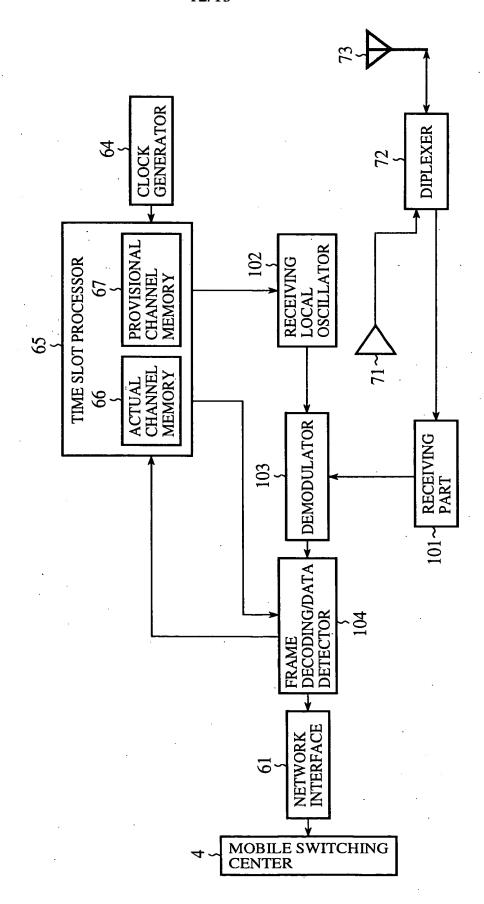


FIG.16

